

Knowing when you don't know: How perceived confidence may contribute to the vocabulary gap

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BACKGROUND

- Children from lower SES homes on average have poor vocabulary skills compared with higher SES peers
- Reasons for the vocabulary gap before children enter school are well-documented; however, far less is known about why the vocabulary gap continues to grow throughout the school years.
- In grade school, inferring a new word's meaning with the surrounding linguistic context becomes a primary means of vocabulary learning.
- One important component of word learning is acknowledging when you do or do not know the word's meaning (i.e. perceived confidence) so that you may actively seek out more information to form an accurate semantic representation.

RESEARCH QUESTIONS

Do school-aged children from lower SES homes learn fewer words from context than higher SES peers?

Are there differences between lower and higher SES children in the relationship between perceived performance and actual performance on the word learning task?

PARTICIPANTS

Age in Years	N
8-10 years ($M_{age}=9.4, SD=0.9$)	16
11-13 years ($M_{age}=12.8, SD=1.0$)	18
14-16 years ($M_{age}=14.8, SD=0.8$)	12
Socioeconomic Status	N
Low SES (Qualified for Free/Reduced Lunch)	23
Higher SES (Did not qualify for Free/Reduced Lunch)	23

WORD LEARNING TASK DESIGN

EXAMPLE STIMULI

Be sure to stay out of the thuv.
That room gets light from the thuv.
Some glasses protect your eyes from the thuv.

TEACHING STAGE

- Read sentence triplets with a nonsense word in the final position
- Average cloze probability (CP) increased across the triplet ($M_{CP}= 4.08\%, 41.15\%, 81.03\%$)

TESTING STAGE

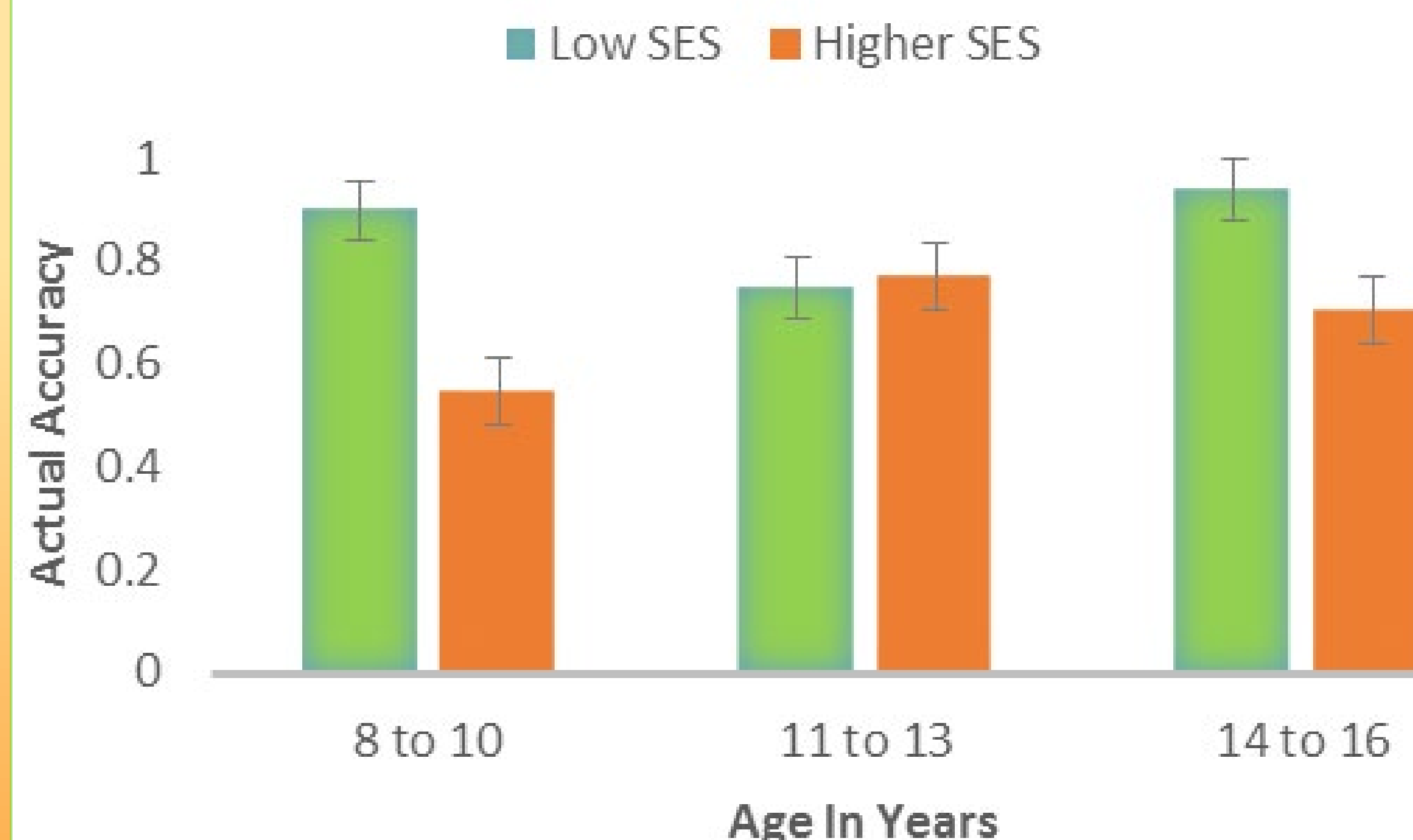
- "What do you think the nonsense word means?"
- "How sure are you that the answer you gave was correct?" (low, medium, high)

RESULTS

Dependent Variable: Percentage of words learned when highly confident

Design: 2(SES; low, high) x 3(Age; 8-10,11-13,14-16) between-subjects ANOVA

ACCURACY WHEN PERCEIVED CONFIDENCE IS HIGH



Results: Main effect of SES ($F(1,40)=6.22, p<.02$), with no significant effect of age.

Children from low SES homes ($M=65.6, SD=30.2$) did significantly worse than their higher SES peers ($M=85.7, SD=15.7$) on the word learning task when confidence was high ($t(33.07)=2.826, p<.01$).

DISCUSSION

- Our findings reveal a main effect of SES in the percentage of words learned when participants perceived confidence was high
 - Driven by children from low SES homes performing worse when perceived confidence was high.
- These findings suggest that children from lower SES homes often believe they know the meaning of a word, when in actuality they do not, leading to potentially incomplete semantic representations compared with their higher SES peers.

TAKE HOME MESSAGE

Variability in the ability to distinguish when you do or do not know something may contribute to differences in lower SES children's' depth and breadth of vocabulary knowledge throughout schooling.

REFERENCES

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